MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

TOXICS RULE REVIEW PROJECT

SUMMARY OF WRITTEN COMMENTS RECEIVED
July 6, 2001

I. Toxicity Program Protocols

(a) Once amendments to the rule are drafted, appropriate modification and integration of the Protocols will help clarify the rule and provide a more legal foundation for the Protocols.

(b) Portions of the Protocols should be incorporated into the rule for clarification.

(c) The Protocols provided useful clarification to several sections of the rule and should be incorporated.

(d) Where appropriate, the Protocols should be included in the rule, but they should be revisited for comprehension and practicality.

(e) Would certainly support implementation of the Protocols; they address many of the issues DEP is not seeking comment on.

II. Hardness in Background Waters

(a) Agree with DEP's proposal to set a statewide default hardness of 20 mg/L and to provide licensees with the opportunity to change the value with monitoring data.

(b) Disagree with DEP's 3/5/01 proposal for hardness determinations. DEP needs to justify applicability of the EPA formula for deriving standards below a hardness of 25 mg/L.

(c) Do not oppose hardness criteria that DEP has proposed. No further changes are needed and the existing Protocol should be no less stringent.

III. Background Levels in Ambient Waters

(a) Background levels should be established before allocation of assimilative capacity issues are addressed. Background concentrations could prove to be thorny issues; existing data should be considered with caution since clean sampling techniques have generally not been used. Clean sampling methods should be used in establishing background concentrations.

(b) It is appropriate for the rule to establish methods to account for background metal concentrations. The Department should subtract out background concentrations or provide variances since a discharger has no control over them and should not be held accountable.

(c) This issue will need significant discussion. Definitions and justification of the data used will be needed. EPA recently developed an "expedited" site water effects ratio for copper and is working on other metals.

(d) This area needs careful study using good, site specific information. An integrated weight of evidence approach needs to be applied to development of criteria for setting effluent limits. An evaluation of how other states address background levels is recommended.

(e) Support action by DEP to use background concentrations in evaluations.

IV. Allocation of Assimilative Capacity

(a) Comment is reserved until DEP develops a method for determining assimilative capacity in water bodies having multiple dischargers.

(b) Would like to see more information on this. What are other states doing?

(c) This approach should be limited to waters where there are non-attainment issues.

(d) The DEP should establish assimilative capacity for toxics.

V. Pollution Prevention

(a) The use of a pollution prevention plan, similar to that in the mercury program, could replace the TRE requirement. A facility would be more responsive to using a pre-approved P2 plan, as it would eliminate the need to develop a costly TRE and would be more proactive in preventing effluent toxicity problems. This can be done by expanding existing mercury P2 plans to include TREs.

(b) Rules are not intended to be vehicles for best management practices or recommendations. A guidance manual could be developed by DEP and distributed to treatment facilities.

(c) Pollution prevention incentives should not be used to offset testing requirements.

VI. Applicability and Testing Frequency

(a) The frequency of WET and priority pollutant testing should be reduced for facilities with high dilution factors. Suggest only screening testing be required, and drop surveillance testing.

(b) Surveillance testing should continue at a rate of once per year, with screening testing being reduced.

(c) The high, medium and low risk criteria currently in the rule need to be reevaluated considering the results testing done and dilution factors. Test frequencies can be reduced in many cases.

(d) The rule should allow flexibility to spread out testing over the term of a permit rather than more in a screening year.

(e) The criteria for reduced testing should include consideration of prior tests and dilution factors in addition to or in place of some of the existing criteria.

(f) The test results from the past several years should be used to revisit who is subject to the rule and the amount of testing required.

(g) The types of facilities covered by the rule are generally appropriate, although some others, such as oil/water separators, should be considered for inclusion.

VII. WET Testing Organisms and Procedures

(a) The use of trout is not worthwhile since many waters do not have trout and the test organisms are not available year round.

(b) The use of hypothesis testing for statistical evaluation of WET test results is flawed. The Inhibition Concentration method should be used instead.

(c) Question if references to fathead minnows need to remain in the rule; DEP has always favored trout. The availability for trout is sometimes limited. Recommend that rainbow trout be specified in the rule as an alternative salmonid species during the third and forth quarters.

(d) The current species used for WET testing are appropriate. Fathead minnows should be allowed as a substitute for trout when the latter are not available.

(e) In high dilution situations, WET tests could be limited to acute testing with fish and crustacean species.

(f) The Inhibition Concentration method should be used for WET testing as it better identifies biologically significant changes.

(g) The use of artificial sea water or alternate sources of natural seawater should be allowed. The logistics of collecting site water and possible shipping delays make it difficult to assure the quality of dilution water.

(h) The availability of sea urchins for WET testing is limited for more than 6 months of the year. This poses particular problems for intermittent discharge sources.

(i) Isn't it appropriate to require testing of only salmonid species instead of two? This could be based on a facility's historical data to establish the most sensitive species.

(j) Some concern that fathead minnows are too resistant to pollution to be of much use; salmonid species are better.

VIII. Chemical Specific Testing

(a) The list of priority pollutant testing should be more narrowly defined.

(b) The scope and scheduling of priority pollutant testing should be scaled back. Many of these compounds are seldom detected.

(c) Priority pollutant testing should be eliminated or reduced since some classes of compounds are consistently reported as non-detect. DEP should review its reporting limits to assure they are achievable.

(d) Laboratories shy away from conducting specific testing on process chemicals that do not have adopted standards such as those established for the priority pollutants.

(e) It would be appropriate to consider eliminating the requirement for priority pollutant testing, since the general absence of volatile and semi-volatile compounds is documented.

(f) It appears that PCBs, pesticides and volatile/semi-volatile organics should be considered for elimination from routine testing. Once per five years should be sufficient.

(g) It is reasonable to discuss the parameters required as part of the chemical specific testing and consider additions and subtractions.

IX. Toxicity Reduction Evaluations

(a) DEP's past practices have been reasonable. The use of "tiered" approach to TREs is recommended. Confirmatory sampling should be done before a TRE is initiated.

(b) The term TRE implies a serious study that is not always warranted; the terms should be changed or better defined to include a wider range of possible actions. Pollution prevention concepts could be outlined in this section.

(a) The Protocols acceptably resolved the TRE issues.

X. Water Quality Based Effluent Limits and Dilution Factors

(a) Licensees should be able to submit monitoring data to support a different 7Q10 value.

(b) Establishing limits is a significant implementation challenge for the rule. The need to reopen license based on a one-time exceedence is questioned. The ambient water quality criteria provide levels that may not be exceeded more than once in three years on average. Thus, single sampling event may not indicate a criterion was violated.

(c) The use of the ¼1Q10 as a default value for calculating acute effects should be revisited. It is not clear how this is linked to the 3/4 zone of passage requirement. The DEP's use of near field models for marine discharges typically generates very conservative estimates.

(d) It may be unreasonable to impose permit limits based on only one high test when all other indicators (benthic, WET or chemical testing) are satisfactory.

(e) A "weight of evidence" approach should be used to evaluate all information about a discharge together. The rule should allow DEP some flexibility to balance Wet, chemical and benthic information to avoid unnecessary and restrictive regulation.

(f) A single exceedence should not necessarily mean an automatic permit limit. The DEP should have some latitude to consider a phased or tiered approach to addressing exceedences with permit limits as one option.

(g) Some concerns with how DEP calculates dilution factors. In some cases, the resulting values may be too high, especially for estuarine waters and rivers with tidal influences. More detailed plume dispersion models should be considered in place of using base flows.

XI. Ambient Water Quality Criteria

(a) DEP must use the best science to set ambient water quality criteria. This rulemaking should consider adoption of the criteria published by EPA in December 1998.

(b) The use of EPA criteria is generally supported. However, DEP should use more stringent criteria where necessary.

XII. Other Issues

(a) The references to WET test methods in the rule need to be updated.

(b) There was little notice of this intended rulemaking and the apparent scope is very broad.

(c) Revisions of the rule should include consideration of sediment toxicity concerns.

(d) If DEP intends to continue to include biomonitoring in permits, it should subject the biomonitoring program to rule making as part of the toxic rule.

(e) Rule making for the biomonitoring program should go forward as soon as possible.

(f) Expansion of testing requirements to include sub-lethal chronic toxicity should be considered.

(g) Sediment criteria are necessary for effective toxics control. Because EPA is unlikely to promulgate criteria in the foreseeable future, DEP should consider doing so.